

IN THE CLAIMS

This listing of claims replaces all prior listings.

1. (Previously Presented) A micromachine comprising:
a substrate;
a first electrode, a second electrode, and a support electrode disposed on said substrate;
one or more protective films disposed on said first electrode and said support electrode;
and
a band-shaped vibrator electrode comprising (a) a vibrating part overlaying said second electrode, the vibrating part being spaced apart from the second electrode with a gap therebetween, and (b) end parts secured to said first electrode and said support electrode, a portion of each end part overlying one of the protective films.
2. (Previously Presented) A micromachine as claimed in claim 1, wherein, said vibrator electrode is formed of a material capable of being etched selectively without affecting a material of said first electrode.
3. (Previously Presented) A micromachine as claimed in claim 1, wherein, a width of the end part of said vibrator electrode which is fixed to said first electrode is greater than the width of said first electrode.
4. (Withdrawn) A method of manufacturing a micromachine comprising the steps of:
forming an input electrode and an output electrode by patterning a first conductive layer on a substrate;
forming an insulative protective film on an upper surface of said input electrode and on the substrate on an opposite side from said input electrode with said output electrode interposed between said input electrode and the opposite side;
forming a sacrificial layer capable of being etched selectively without affecting said protective film on said substrate in a state of covering said input electrode and said output electrode with a surface of said protective film exposed;
forming connecting holes reaching said input electrode and said substrate in said protective film;

forming a band-shaped vibrator electrode having both end parts completely covering insides of said connecting holes, an edge of each of said end parts being situated on said protective film, and having a central part crossing over said output electrode by patterning a second conductive layer formed on said sacrificial layer including the insides of said connecting holes; and

creating a space part between said vibrator electrode and said output electrode by selectively removing said sacrificial layer.

5. (Withdrawn) A method of manufacturing a micromachine comprising the steps of:
forming an input electrode and an output electrode by patterning a first conductive layer on a substrate;

forming a sacrificial layer covering said input electrode and said output electrode over said substrate;

forming, in said sacrificial layer, a connecting hole reaching said input electrode and a connecting hole reaching a surface of said substrate on an opposite side from said input electrode with said output electrode interposed between said input electrode and the opposite side;

forming a second conductive layer capable of being etched selectively without affecting said first conductive layer on said sacrificial layer including said connecting holes;

forming a band-shaped vibrator electrode having an edge of both end parts disposed within each of said connecting holes, and having a central part crossing over said output electrode by selective pattern etching of said second conductive layer without affecting said first conductive layer; and

creating a space part between said vibrator electrode and said output electrode by selectively removing said sacrificial layer.

6. (Previously Presented) A micromachine as set forth in claim 1, wherein said first electrode is an input electrode and said second electrode is an output electrode.